

# TECHNICAL SERVICE BULLETIN

21-2250

## Poor A/C Performance And/Or Engine Cooling Fans Running Continuously

01 September 2021

### Model:

Ford 2015-2020 F-150
2017-2020 F-Super Duty
2018-2020 Expedition
<b>Lincoln</b> 2018-2020 Navigator

**Issue:** Some 2015-2020 F-150, 2017-2020 Super Duty and 2018-2020 Expedition/Navigator vehicles may exhibit poor air conditioning (A/C) performance, loss of airflow and/or engine cooling fans running continuously from high A/C pressures. This concern may be from the evaporator freezing up due to the evaporator temperature sensor being biased. To correct the condition, follow the Service Procedure steps to replace the evaporator temperature sensor.

Action: Follow the Service Procedure steps to correct the condition on vehicles that meet all of the following criteria:

- One of the following vehicle lines:
  - 2015-2020 F-150
  - 2017-2020 Super Duty
  - 2018-2020 Expedition/Navigator
- Poor A/C performance
- Engine cooling fans running continuously

NOTE: Part quantity refers to the number of that service part number required, which may be different than the number of individual pieces. Service part numbers contain 1 piece unless otherwise stated. "As Needed" indicates the part is required but the number may vary or is not a whole number; parts can be billed out as non-whole numbers, including less than 1.

### **Parts**

Part Number		Description	Quantity
ML3Z- 19860-A	-	Evaporator Assembly (2015-2019 F-150 With 6R80, 2017-2020 F- Super Duty With 6R140 With R-134A Refrigerant)	1
ML3Z- 19860-B	-	Evaporator Assembly (2017-2020 F-150 With 6R80 And R-1234YF Refrigerant)	1
ML3Z- 19860-C	-	Evaporator Assembly (2017-2020 F-150 With 10R80, 2020 F- Super Duty With 10R140, 2017-2020 Expedition and Navigator)	1
W714409- S439	Package Contains 4 Pieces, 1 Piece Required	Steering Shaft Bolt	1
W717731- S451	Package Contains 4 Pieces, 8 Pieces Required	Seat Bolt	2
VC-3-B	-	Motorcraft® Orange Concentrated Antifreeze/Coolant (All Markets Except Canada)	As Needed
CVC-3-B2	-	Motorcraft® Orange Concentrated Antifreeze/Coolant (Canada Only)	As Needed

VC-13-G	-	Motorcraft® Yellow Concentrated Antifreeze/Coolant (All Markets Except Canada)	As Needed	
CVC-13- G	-	Motorcraft® Yellow Concentrated Antifreeze/Coolant (Canada Only)	As Needed	

**Warranty Status:** Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/SPW/SSP/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

#### **Labor Times**

Description	Operation No.	Time
2015-2020 F-150 40/40 Seat: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	212250A	4.8 Hrs.
2015-2020 F-150 40/20/40 Seat: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	212250B	4.8 Hrs.
2015-2020 F-150 Console: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	212250C	5.0 Hrs.
2015-2020 F-150 Floor Shift: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	212250D	5.6 Hrs.
2017-2020 F-Super Duty 40/20/40: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	212250E	4.9 Hrs.
2017-2020 F-Super Duty Console: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	212250F	5.1 Hrs.
2017-2020 F-Super Duty 6.7L 40/20/40 Seat: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	212250G	4.7 Hrs.
2017-2020 F-Super Duty 6.7L Console: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	212250H	4.9 Hrs.
2018-2020 Expedition: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	212250J	4.8 Hrs.
2018-2020 Navigator: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	212250K	5.2 Hrs.
2018-2020 Navigator Equipped With HUD: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	212250L	6.0 Hrs.

## Repair/Claim Coding

Causal Part:	19860
Condition Code:	42

## **Service Procedure**

NOTE: If A/C pressures on both sides are too high, perform an evacuation/recharge procedure before diagnostics.

- 1. Run the A/C on maximum/recirculation and blower speed on high for at least 10 minutes with the engine idling, then drive the vehicle.
- 2. Using the datalogger on the appropriate Ford diagnostic scan tool, pull up the EVAP\_TEMP PID in the front controls interface module (FCIM) to read the evaporator temperature and use a thermometer to measure the vent outlet temperature. Compare the temperature reading of the EVAP\_TEMP PID to the thermometer's vent outlet temperature reading during A/C use.
- **3.** Is the temperature reading shown on the vent outlet thermometer colder than the temperature reading of the EVAP\_TEMP PID?
  - (1). Yes replace the evaporator assembly per the Workshop Manual (WSM), Section 412-00. The evaporator temperature sensor is part of the evaporator assembly.

(2). No - this article does not apply. Refer to the WSM for normal diagnostics.

#### © 2021 Ford Motor Company

All rights reserved.

NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.